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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,110	02/08/2002	Takashi Miyoshi	15257	2541

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EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT PAPER NUMBER

2851

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,110

Applicant(s)

MIYOSHI, TAKASHI

Examiner

Rochelle Blackman

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yoneyama et al., U.S. Patent No. 5,570,150.

Yoneyama discloses a "stereo adapter which is mounted in front of an imaging optical system of a camera to photograph a parallax image"(see Figs. 17-27); an "optical system which has two light-receiving modules provided so as to be spaced apart from each other by a predetermined distance to receive light from a same object and which directs the received light from each of the two light-receiving modules to the imaging optical system of the camera"(see 14a and 14b of Figs. 22-24); a "light-emitting module which is provided at a predetermined position associated with said optical system and can emit light to illuminate the object"(see 34 of Fig. 18 and Figs. 19-21).

2. Claims 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Oles, U.S. Patent No. 5,946,500.

Oles discloses a "pattern projection adapter (see filter in col. 5, lines 7-11) which is mounted to a front surface of a light-emitting device (see 48 of Figs. 2 and 3) used in relation to a camera (see 46 of Figs. 2 and 3) to project a predetermined pattern onto an

Art Unit: 2851

object”, comprising: a “pattern filter which is placed so as to be adjacent to a light-emitting surface of said light-emitting device in a state of being mounted to said light-emitting device, and which has a predetermined pattern at an area through which light from said light-emitting device transmits”(see filter in col. 5, lines 7-11); a “projection optical system which receives the light transmitted through said pattern filter and projects said pattern”(see 62 of Figs. 2 and 3); and a “mounting member which detachably mounts said adapter to said light-emitting device of the camera”(see removable filter holder in col. 5, lines 7-11); a “light beam dividing module which divides the light transmitted through said pattern filter into two light beams, and the divided light beams are projected onto the same object from different positions, respectively”(see 60 of Figs. 2 and 3); an “adapter for light-emitting module which is mounted to a front surface of a light-emitting module of a camera”(see 62 of Figs. 2 and 3), comprising: a “light beam dividing module which divides the light beam from said light-emitting module into two light beams; and a deflecting module which deflects each of the light beams from said light beam dividing module such that its proceeding direction direct to the same object”(see 60 of Figs, 2 and 3).

3. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Medina et al., U.S. Patent No. 4,695,130.

Medina discloses an “adapter for light-emitting module which is mounted to a front surface of a light-emitting module of a camera”(see 51 of Fig. 4), comprising: a light beam dividing module which divides the light beam from said light-emitting module into two light beams”(see 57 of Figs. 4 and 5); and a “deflecting module which deflects

each of the light beams from said light beam dividing module such that its proceeding direction direct to the same object”(see 57, 57A, and 57B in Figs. 4 and 5).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 5, 7, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Osterweil et al., U.S. Patent No. 6,567,682.

Osterweil discloses a “stereo adapter which is mounted in front of an imaging optical system of a camera to photograph a parallax image”(see 102, 104, and 136 of Fig. 5), comprising: an “optical system which has two light-receiving modules provided so as to be spaced apart from each other by a predetermined distance to receive light from a same object and which directs the received light from each of the two light-receiving modules to the imaging optical system of the camera”(see 102 and 104 of Fig. 5); and a “light-emitting module which is provided at a predetermined position associated with said optical system and can emit light to illuminate the object”(see 136 of Fig. 5); “wherein said light-emitting module is disposed at an intermediate position between said two light-receiving modules”(see location of 136 in Fig. 5); a “stereo

adapter which is mounted in front of an imaging optical system of a camera to photograph a parallax image”(see 102, 106, and 136 of Fig. 5), comprising: an “optical system which has two light-receiving modules provided so as to be spaced apart from each other by a predetermined distance to receive light from a same object and which directs the received light from each of the two light-receiving modules to the imaging optical system of the camera”(see 102 and 104 of Fig. 5); and a “pattern projection module which is provided at a predetermined position associated with said optical system and projects a predetermined pattern onto the object”(see 136 and 138 of Figs. 5 and 6); “wherein said pattern projection module is disposed at an intermediate position between said two light-receiving modules”(see location of 136 of Fig. 5); a “stereo adapter which is mounted in front of an imaging optical system of a camera to photograph a parallax image”(see 102, 104, and 136 of Fig. 5), comprising: an “optical system which has two light-receiving modules provided so as to be spaced apart from each other by a predetermined distance to receive light from a same object and which directs the received light from each of the two light-receiving modules to the imaging optical system of the camera”(see 102 and 104 of Fig. 5); a “light-emitting module which is provided at a predetermined position associated with said optical system and can emit light to illuminate said object”(see 136 of Fig. 5); a pattern projection module which is provided at a predetermined position associated with said optical system and projects a predetermined pattern onto the object”(see 136 and 138 of Fig. 5); an “input module which inputs a photographing timing signal from said camera and a processing circuit which, in accordance with the input of said photographing timing signal, alternatively

performs emission by said light-emitting module and pattern projection by said pattern projection module”(see 125 and 132 of Fig. 5); and a “position changing mechanism which can support said light-emitting module and said pattern projection module in order for their order or positions to be varied in a direction orthogonal to a base line”(see col. 12, lines 4-31).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osterweil et al., U.S. Patent No. 6,567,682 in view of Alderman, U.S. Patent No. 2,290,793.

Osterweil discloses the claimed invention except for a light-emitting module that is disposed at such a position that the light from said light-emitting module “superposes an optical path from one of the two light-receiving modules to said object”.

Alderman discloses a combination camera and illuminator with light sources 14 mounted on end wall 3 enclosed in an open-ended bowl-like reflector shell having converging side walls 2 and a reflector wall 11. Side walls 2 and reflector wall 11 are polished, plated, mirrored, or otherwise treated to afford any desired type of light-reflecting characteristics (see Figs. 1-4 and col. 2, lines 26-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the "light-emitting module" of the Osterweil reference at a position that superposes an optical axis from a "light-receiving module" of the Osterweil reference as taught by Alderman, in order to reflect additional or more light upon an object being photographed.

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osterweil et al., U.S. Patent No. 6,567,682 in view of Alderman, U.S. Patent No. 2,290,793.

Osterweil discloses the claimed invention except for a pattern projection module that is disposed at such a position that the light from the pattern projection module for pattern projection "superposes an optical path from one of said two light-receiving modules to said object".

Alderman discloses a combination camera and illuminator with light sources 14 mounted on end wall 3 on opposite sides of camera lens 32 at equal distances, enclosed in an open-ended bowl-like reflector shell having converging side walls 2 and a reflector wall 11. Side walls 2 and reflector wall 11 are polished, plated, mirrored, or otherwise treated to afford any desired type of light-reflecting characteristics (see Figs. 1-4 and col. 2, lines 26-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the "pattern projection module" of the Osterweil reference at a position that superposes an optical axis from a "light-receiving module" of the Osterweil reference as taught by Alderman, in order to reflect additional or more light upon an object being photographed.

Art Unit: 2851


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (703) 308-2879. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached on (703) 308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

RB
July 5, 2003


RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
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